



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,049	04/01/2002	William Thomas Melvin	0380-P02753US0	4396

110 7590 11/05/2002

DANN DORFMAN HERRELL & SKILLMAN  
SUITE 720  
1601 MARKET STREET  
PHILADELPHIA, PA 19103-2307

EXAMINER

HADDAD, MAHER M

ART UNIT	PAPER NUMBER
----------	--------------

1644

DATE MAILED: 11/05/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/009,049

Applicant(s)

MELVIN ET AL.

Examiner

Maheer M. Haddad

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-24 and 27-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-19, 21-24 and 27-37 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

*Restriction Requirement*

1. Claims 1-19, 21-24 and 27-37 are pending.
2. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
  - I. Claims 1-11, 21, 30-32 and 36, drawn to a peptide of SEQ ID NO:1, variants, fragments, and a fusion peptide.
  - II. Claims 1-11, 21, 30-32 and 36, drawn to a peptide of SEQ ID NO:2, variant, fragments, and a fusion peptide.
  - III. Claims 1-11, 21, 30-32 and 36, drawn to a peptide of SEQ ID NO:3, variant, fragments, and a fusion peptide.
  - IV. Claims 1-11, 21, 30-32 and 36, drawn to a peptide of SEQ ID NO:4, variant, fragments, and a fusion peptide.
  - V. Claims 12, 27-29 and 33, drawn to an isolated nucleic acid encoding a peptide of SEQ ID NO:1.
  - VI. Claims 12, 27-29 and 33, drawn to an isolated nucleic acid encoding a peptide of SEQ ID NO:2.
  - VII. Claims 12, 27-29 and 33, drawn to an isolated nucleic acid encoding a peptide of SEQ ID NO:3.
  - VIII. Claims 12, 27-29 and 33, drawn to an isolated nucleic acid encoding a peptide of SEQ ID NO:4.
  - IX. Claims 13-14 and 34-35, drawn to an antibody or binding fragment capable of binding to a peptide of SEQ ID NO:1.
  - X. Claims 13-14 and 34-35, drawn to an antibody or binding fragment capable of binding to a peptide of SEQ ID NO:2.
  - XI. Claims 13-14 and 34-35, drawn to an antibody or binding fragment capable of binding to a peptide of SEQ ID NO:3.

Art Unit: 1644

- XII. Claims 13-14 and 34-35, drawn to an antibody or binding fragment capable of binding to a peptide of SEQ ID NO:4.
- XIII. Claims 15-17 and 24, drawn to a method of identifying a compound capable of modulating a fibrin fragment E activity, wherein the compound is a peptide of or an analog thereof and the method comprises the providing an antibody or binding fragment capable of binding SEQ ID NO:1.
- XIV. Claims 15-17 and 24, drawn to a method of identifying a compound capable of modulating a fibrin fragment E activity, wherein the compound is a peptide of or an analog thereof and the method comprises the providing an antibody or binding fragment capable of binding SEQ ID NO:2.
- XV. Claims 15-17 and 24, drawn to a method of identifying a compound capable of modulating a fibrin fragment E activity, wherein the compound is a peptide of or an analog thereof and the method comprises the providing an antibody or binding fragment capable of binding SEQ ID NO:3.
- XVI. Claims 15-17 and 24, drawn to a method of identifying a compound capable of modulating a fibrin fragment E activity, wherein the compound is a peptide of or an analog thereof and the method comprises the providing an antibody or binding fragment capable of binding SEQ ID NO:4.
- XVII-XX. Claim 18, drawn to a process for producing a modulator identified by the method of providing contacting an antibody or binding fragment capable to bind SEQ ID NOS:1-4 **RESPECTIVELY** with a modulating compound.
- XXI-XXIV. Claim 19, drawn to a modulator or fibrin fragment E activity identified by the method of providing contacting an antibody or binding fragment capable to bind SEQ ID NOS:1-4 **RESPECTIVELY** with a modulating compound.
- XXV-XXVIII. Claim 23, drawn to a method of inhibiting stimulation of cell proliferation induced by fibrin fragment E comprising bringing the cell into contact with a peptide of SEQ ID NOS:1-4 **RESPECTIVELY**.
- XXIX-XXXII. Claims 22 and 37, drawn to a coronary stent comprising a peptide of SEQ ID NO: 1-4 **RESPECTIVELY**, or a fragment thereof

The inventions listed as Groups I-XXXII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Art Unit: 1644

The invention of Group I was found to have no special technical feature that defined the contribution over the prior art of Castelhana *et al* ( WO 98/54208) (see entire document).

The '208 publication teaches a variant peptide of SEQ ID NO: 1 which is a variant of a fragment of 9 amino acids in length (PRPLPVAPG), which variant has three deletions with respect to said fragment (aa7-9). (see example 12, page 59, line 18 in particular) The recitation that "wherein the variant peptide is capable of modulating a fibrin fragment E activity" is considered an inherent property of the reference peptide.


Since Applicant's inventions do not contribute a special technical feature when viewed over the prior art they do not have a single general inventive concept and so lack unity of invention.

3. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad, whose telephone number is (703) 306-3472. The examiner can normally be reached Monday to Friday from 8:00 to 4:30. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached at (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

Maher Haddad, Ph.D.  
Patent Examiner  
Technology Center 1600  
October 26, 2002

  
CHRISTINA CHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600